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BIOLOGICAL NOTES

PYGOSPIO ELEGANS CLAPARÈDE INHABITING BALTIC COASTAL ZONE SHOWS PREDATION AGAINST OLIGOCHAETES

Zbigniew Piesik

*Department of Ecology and Protection of the Sea,
Pomeranian Pedagogical University of Słupsk,
Arciszewskiego St. 22B, 76-200 Słupsk, Poland
E-mail: piesik@pap.edu.pl*

Studies on the ecological role of macrozoobenthos carried out within Poland's coastal zone of the Baltic (Middle Pomerania, Piesik, 1998), have revealed that alimentary tracts of the polychaetes *Pygospio elegans* Claparède contained numerous remnants of oligochaetes (Figure 1).



Fig. 1. The stables in the intestine *P. elegans* (10 mm length) in coastal zone of the Slowinski National Park

More detailed examinations of *P. elegans* alimentary canals, carried out in the shore area near the town of Ustka and close to the Słowiński National Park, clearly demonstrated that larger specimens were more often found to contain remnants (spicules) of oligochaetes than smaller ones.

The frequency of oligochaetes found in the *P. elegans* food in Poland's Baltic coastal zone increased with the polychaete size, from 30% in 7-mm-long individuals to 100% in the largest ones, i.e. those of 16 mm in length (Piesik, in press). From the literature we learn that *Pygospio elegans* is most often ranked as a deposit feeder which inhabits bottom deposits containing low level of organic matter (Hentschel, 1996; Osowiecki, 2000; Wiktor, 1985). An analysis of data reported by Bolam & Fernandes (2003) and Kotwicki (2000) shows that increasing density of *P. elegans* is accompanied by reduced oligochaete densities. This may imply that shore-zone populations of oligochaetes are controlled not only by *Crangon crangon* or juvenile benthic-feeding fishes (Aarnio et al., 1996; Mattila, 1997), but also by *Pygospio*. Since *P. elegans* belongs to the most abundant benthic species of the coastal zone of Middle Pomerania (Piesik & Wolikowski, in press), the role of the organism for the food web of the Baltic shallow-water biocenosis should be more precisely determined.

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